IN THE CLAIMS:

Please amend the claims as follows

Claim 1 (Currently Amended): A photodiode array comprising a semiconductor

substrate,

wherein a plurality of photodiodes are formed in array on an opposite surface side to an

incident surface of light to be detected, in the semiconductor substrate, and

wherein a depression with a predetermined depth more depressed than a region not

corresponding to regions a region where the plurality of photodiodes are formed, is formed in

regions the region corresponding to the regions region where the plurality of photodiodes are

formed, on a side of the incident surface of the light to be detected, in the semiconductor

substrate.

Claim 2 (Canceled).

Claim 3 (Currently Amended): The photodiode array according to Claim 1 A

photodiode array comprising a semiconductor substrate.

wherein a plurality of photodiodes are formed in array on an opposite surface side to an

incident surface of light to be detected, in the semiconductor substrate,

wherein a plurality of depressions with a predetermined depth more depressed than a

regions not corresponding to a region where the respective photodiodes is formed, are formed in

the respective regions corresponding to the respective photodiodes is formed, on a side of the

incident surface of the light to be detected, in the semiconductor substrate

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wherein the depression comprises a plurality of depressions formed corresponding to the

respective photodiodes, and

wherein adjacent depressions are in communication with each other, in the semiconductor

substrate.

Claim 4 (Currently Amended): The photodiode array according to any one of Claims 1

to 3 Claim 1 or 3, wherein the semiconductor substrate is provided with an impurity region

between the photodiodes adjacent to each other, for separating the photodiodes from each other.

Claim 5 (Currently Amended): The photodiode array according to Claim 1 or 3 elaim-1,

wherein a high-impurity-concentration layer of the same conductivity type as the semiconductor

substrate is formed on the incident surface side of the light to be detected, in the semiconductor

substrate.

Claims 6-11 (Canceled).

Claim 12 (Currently Amended): A radiation detector comprising:

the photodiode array as set forth in Claim 1 or 3 claim 1; and

a scintillator panel arranged opposite to the incident surface of the light to be detected in

the photodiode array, and arranged to emit light with incidence of radiation.

Claims 13-14 (Canceled).

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Claim 15 (New): The photodiode array according to Claim 4, wherein a high-impurity-

concentration layer of the same conductivity type as the semiconductor substrate is formed on

the incident surface side of the light to be detected, in the semiconductor substrate.

Claim 16 (New): A radiation detector comprising:

the photodiode array as set forth in Claim 4; and

a scintillator panel arranged opposite to the incident surface of the light to be detected in

the photodiode array, and arranged to emit light with incidence of radiation.

Claim 17 (New): A radiation detector comprising:

the photodiode array as set forth in Claim 5; and

a scintillator panel arranged opposite to the incident surface of the light to be detected in

the photodiode array, and arranged to emit light with incidence of radiation.